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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/440,163	11/15/1999	MINORU IMURA	323810/98	2609

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EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/440,163

Applicant(s)

IMURA, MINORU

Examiner

Philip J. Sobutka

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-18 and 21-24 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,19 and 25-30 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,2,19,20 are rejected under 35 U.S.C. 102(e) as being anticipated by Bang et al (US 6,222,873).

Consider claim 1, Bang et al teaches a communication apparatus wherein transmission data containing first and second signal different from the first is transmitted comprising (Bang, control and communication signals see especially fig 7, col 10, lines 50-60); a transmission power controller for controlling at least one of transmission power of the first and second signals in such a manner that the transmission power of the first signal is made coincident with the transmission power of the second (Bang see especially col 10, lines 50-60); and a transmitter for transmitting the transmission data containing the first and second signals in the power controlled by the transmission power controller (Bang see fig 4).

As to claim 19, the apparatus of Bang would perform the claimed steps.

As to claims 2,20, note that Bang teaches multiplying by a predetermined coefficient ( bang see especially col 10, lines 50-60).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bang in view of Yoon (US 6,396,868).

Consider claim 4. The nearest prior art as shown in Bang fails to teach the communication apparatus further comprising: interleave means for rearranging sequence of the data. Yoon teaches that it is well known to use interleaving to rearrange sequence of transmitted CDMA data (Yoon see especially col 6, lines 41-62). Yoon also teaches that use of interleaving can reduce interference to other users (Yoon see especially col 7, line 65 – col 8, line 8). It would have been obvious to one of ordinary skill in the art to modify Bang to use interleaving as taught by Yoon in order to prevent interference to other users.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 25-30 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

7. Claim 25 recites the limitation "said transmission power control unit" in line 15.

There is insufficient antecedent basis for this limitation in the claim. It is suggested that

the claim be amended by inserting -- using a transmission power control unit -- after "data" in line 11.

***Allowable Subject Matter***

8. Claims 6-11,12-18,21-24 are allowed.

Consider claims 6,21. The nearest prior art as shown in Bang fails to teach a method and apparatus for spreading a plurality of transmission data by employing different spreading codes to output spread signals, synthesizing the plurality of spread signals with each other to output a synthesized signal; outputting a predetermined coefficient; multiplying the synthesized signal by the coefficient, and transmitting the signal output from the multiplying unit.

Consider claim 12. The nearest prior art as shown in Bang fails to teach a CDMA communication apparatus in which, with a plurality of transmission data each having a data signal and a pilot signal, the pilot signal is spread with a first spreading code, the data signal is spread with a second spreading code and all of the spread transmission data are added to each other and the added data is transmitted comprising: controlling the transmission power of the transmission data by a transmission power control unit in such a way the transmission power of the pilot signal is made substantially equal to the transmission power of the data signal and transmitting the transmission data with the power controlled by the transmission power control unit.

9. Claims 25-30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Consider claim 25, The nearest prior art as shown in Bang fails to teach a CDMA communication method and apparatus in which, with a plurality of transmission data each having a data signal and a pilot signal, the pilot signal is spread with a first spreading code, the data signal is spread with a second spreading code and all of the spread transmission data are added to each other and the added data is transmitted comprising: controlling the transmission power of the transmission data by a transmission power control unit in such a way the transmission power of the pilot signal is made substantially equal to the transmission power of the data signal and transmitting the transmission data with the power controlled by the transmission power control unit.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miya (US 6,493,330) has been cited to show a prior art system in which the pilot signal is transmitted at a lower power than the communication signal.

Kotzin (US 6,173,005) has been cited to show the more conventional prior art system in which the pilot is transmitted at a relatively high power for signal acquisition reasons.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 703-305-4825. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Philip Sobutka

Pjs  
October 30, 2003

  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**